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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,621	01/05/2004	Hermann Kauth	PO-8018 / LeA 36,402	2442

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EXAMINER	
BOYKIN, TERRESSA M	

ART UNIT	PAPER NUMBER
1711	

DATE MAILED: 05/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/751,621	KAUTH ET AL.	
	Examiner	Art Unit	
	Terressa M. Boykin	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *5-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

*The Finality of the previous office action has been withdrawn and a new grounds for rejection is set forth below in view of applicants arguments. The previously allowed claims 35 through 53 are now rejected after further consideration of applicants' arguments dated 11-8-05 and 4-18-05 in order to further clarify and properly set forth applicants' intended invention.

Claim Rejections - 35 USC § 112

Claims 5-8 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the broadly defined process as claimed.

Note that the CCPA has criticized the use of the characterization "too broad" or "undue breadth"....however, an application whose claim(s) are of a breadth which are not adequately supported by its specification is in violation of 35 USC 112, first paragraph. In re Borkowski et al., (CCPA 1970) 424 F2d 904; In re Wakefield, (CCPA 1970 422 F2d 897; In re Hammack, (CCPA 197

Claims 5-8 must be specified in accordance with the disclosure at pages 3-5. While stated as a preference there is no other disclosure of what limits are intended and what the properties would be.

35 USC 112, Second Paragraph

Claims 5-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Note that a process should at least recite clear,, *active* steps and any process parameters necessitated by the specification so that the claim will "clearly set out and circumscribe a particular area with a reasonable degree of precision and particularity, In re Moore, 169 USPQ 236, and make it clear what subject matter the claim encompasses, as well as make clear the subject matter from others would be precluded. In re Hammack 166 USPQ 204. According to applicants' specification, it appears to the Examiner, in view of applicants' previous arguments that the specific process as set forth on pages 3-5 of the specification afford the unexpected results as discussed by applicants'.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 5-8 are rejected under 35 U.S.C. 102(a, b, or e) as being anticipated by FR 1452218 (as noted in applicants' I.D.S. and corresponding to GB 1118146) page 2 second column (or abstract and example 1 of GB) ; USP 4558118 see claims 12.,13., 18.

FR 1452218 (corresponding to GB 118146 of applicants' I.D.S.) discloses polyesters, specifically polycarbonates, are made by reacting together a dihydroxy compound and the dichloride of a dicarboxylic acid in the form of a fine dispersion, or even an emulsion, in water with an organic

solvent and the usual catalysts, chain-terminators etc. The reactor may have more than one reaction chamber, and successive additions of catalyst, solvent, reactant, chain-terminator etc. may be made in each reaction chamber as required. This method gives close control of the m. wt. of the polymer, and of its range of m. wts. Note example 1 of the reference states:

EXAMPLE 1

Into a reaction vessel of capacity 200 ml provided with vigorous stirring means, an aqueous alkaline solution of diphenylolpropane (containing 6% NaOH and having a molar ratio of diphenylolpropane to NaOH of 1:2.6) and methylene chloride, are continuously introduced by means of metering pumps with approximately equal volumetric flow-rates (of about 18 l/h each). A continuous stream of phosgene having a flow-rate (about 0.96 kg/h) is also admitted to the vessel such that the chlorine ion concentration in the aqueous phase of the effluent from the vessel is about 1.2 mols/litre. The aqueous alkaline solution admitted to the vessel contains also 3.1×10^{-3} mole triethyl-amine (catalyst) and 2.2×10^{-2} mole phenol (chain terminating agent) per mole of diphenylol propane.

USP 4558118 discloses an interfacial polycondensation polycarbonate process for producing aromatic polycarbonate comprising:

The two-phase reaction solvent medium is agitated during the reaction to preferably provide a substantially uniform dispersion of the two phases. The two phases comprise an organic phase containing an inert organic solvent and, optionally, a polycondensation catalyst. The second phase is an aqueous phase which contains a strong base, preferably an alkali metal hydroxide. This aqueous phase contains a sufficient quantity of base to provide a pH of at least about 11.

The organic phase may contain a polycondensation catalyst. This polycondensation catalyst can be any hydrogen halide acceptor commonly employed in interfacial polycondensation reactions. Illustrative of well-known

catalysts are the following; trimethylamine, triethylamine, allyldiethylamine, benzyl dimethylamines, dioctylbenzylamine, dimethylphenethylamine, 1-dimethylamino-2-phenylpropane, N,N,N',N'-tetramethylethylenediamine, N-methylpiperidine, 2,2,6,6-N-pentamethylpiperidine and the like, the presently preferred catalysts of the class are the aliphatic amines, especially triethylamine.

Any amount of polycondensation catalyst can be employed. However, generally, effective mole proportions relative to the dihydroxy aromatic compound are within the range of from about 0.25% to about 2% and are more preferably within the range of about 0.5% to about 1% per mole of aromatic dihydroxy compound. The desired quantity of polycondensation catalyst may be introduced to the reactor in its entirety prior to the reaction or the catalyst may be fed in increments as needed with the aromatic dihydroxy compound, preferably as part of an organic solution.

A phase transfer catalyst can be employed in the reaction if desired and is typically within the aqueous phase. Examples of phase transfer catalysts are low molecular weight (less than 10 carbon atoms) quaternary ammonium, quaternary phosphonium and tertiary sulfonium compounds or mixtures thereof. See Claims 12,13, 18.

Each of the references discloses a continuous two-phase interfacial condensation process for preparing polycarbonates prepared from the same components as claimed by applicants including the level of catalyst per mol of diphenol. In view of the above, there appears to be no significant difference between the reference(s) and that which is claimed by applicant(s). Any differences not specifically mentioned appear to be conventional. Consequently, the claimed invention cannot be deemed as novel and accordingly is

unpatentable.

Correspondence

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Please note that the cited U.S. patents and patent application publications are available for download via the Office's PAIR. As an alternate source, all U.S. patents and patent application publications are available on the USPTO web site (www.uspto.gov), from the Office of Public Records and from commercial sources. Applicants may be referred to the Electronic Business Center (EBC) at http://www.uspto.gov/ebc/index.html or 1-866-217-9197.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Terressa Boykin whose telephone number is 571 272-1069. The examiner can normally be reached on Monday through Friday from 6:30am to 3:00pm.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. The general information number for listings of personnel is **(571-272-1700).**

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tmb

Examiner Terressa Boykin
Primary Examiner
Art Unit 1711